and warmth and fellowship and activity and a renewed source of hope and belonging.

The Home has expansion plans. As always. It must expand, today more than ever. It must therefore necessarily keep all the land it has now. And the land is not needed merely for new buildings. It is needed for living.

Gardening is good for the soul and who is to deny an old soldier a small plot of land to raise some red ripe tomatoes or a few yellow dahlias? Who is to deny him that "easy" non-professional nine-hole golf course? Who is to deny him those lovely old trees that invite a walk in the shade on a hot, humid, summer Washington day? (The National Capital Planning Commission, that's who.)

So, Soldiers Home has lost land before. In 1953, 70 acres were taken for a hospital center and 28 acres were taken for street purposes. In 1959, a church purchased five acres for use as a parking lot. In 1964, Trinity College purchased another 24 acres.

But Soldiers Home must retain all the land it has left now. The United States must meet its pledge to the soldiers who are told that their dime a month is—as they are told—a rare kind of security.

The current land-grabbing plan is to swipe 20 acres of 300-acre Soldiers Home for new school grounds and a new community center.

The plan is due for final approval by the end of the year. The Soldiers Home Board of Commissioners has told the Planning Commission that no more land within the Home's boundaries could be relinguished "for any purpose." The Soldiers Home Board of Commissioners is right.

New schools and new community centers are fine. But land-grabbing from Soldiers Home is not the answer. "Urban renewal," as they call it, is a better answer. Cleaning up and tearing down some of the rat-infested slums—some not far from Soldiers Home—is marvelous grist for the mill of the National Capital Planning Commission. Soldiers Home land is not.

Ranconteur John M. Virden, a retired colonel whose forceful writing livened up several Army Times Company publications in years past, was talking with proper indignation about this proposed steal of Soldiers Home property the other day.

Virden summed it up well: "The National Capital Planning Commission has no more right for arbitrarily grabbing part of the grounds of the Soldiers Home than it has to commandeer the campus of Georgetown University or the front yard of the White House. Maybe not as much. The Home belongs to the enlisted soldiers and to nobody else."

The United States has many commitments throughout the world. Some may question some of these commitments. But who—including the National Capital Planning Commission—can question—much less retract—the commitment the United States makes to its Regular Army enlisted soldiers when it takes that dime a month from each man for Soldiers Home?

ABM

Antiballistic Missiles

SPEECH

OF

HON. JEFFERY COHELAN

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, December 14, 1967

Mr. COHELAN. Mr. Speaker, the deployment of an antiballistic-missile system costing many billions of dollars and necessarily heightening the arms race as well as causing many other changes in our society is a most momentous action.

The administration's decision to deploy such a system has been followed with relatively little debate. Yet the legislative branch has yet to specifically express its desire in this regard and the public has yet to be really informed on this issue.

I personally am engaged in a deep and comprehensive study of the ABM question and I urge my colleagues to engage themselves in such a study.

As an aid in this study, I would like to insert in the RECORD at this point a very provocative article concerning the ABM, which was published recently by the Council for a Livable World:

ANTIBALLISTIC-MISSILE SYSTEM

(By Allen Forbes, Jr.)

(The question of anti-ballistic missile (ABM) deployment is not a new one. In 1959 the Army recommended purchase of its Nike-Zeus system, forerunner of Nike-X now to be deployed. President Eisenhower turned down the Army's request on the grounds that it has not been adequately tested. Had Nike-Zeus with its "fatal defects" been deployed as the Army urged—at a cost of $14 billion—it would, in the words of Deputy Secretary of Defense Cyrus Vance, "have had to be torn out and replaced, almost before it became operational . . ."[1] ABM did not become a serious issue again until the Joint Chiefs of Staff recommended deployment of Nike-X in 1966. They renewed their pressure in 1967 and, backed by influential members of Congress, secured a reversal of the Administration's anti-ABM position. In a speech delivered a San Francisco on September 18, 1967, Secretary of Defense McNamara announced that the United States would deploy a thin ABM defense against China. This decision, which has vast strategic, political and social implications for the future of this country, may well turn out to be one of the most fateful ever taken by any Administration.)

THE NIKE–X SYSTEM

Nike-X is a dual system. To provide an "area" defense it employs the 3–stage, long-range Spartan missile to intercept incoming enemy ICBM's (intercontinental ballistic missiles) at ranges up to several hundred miles, well beyond the earth's atmosphere. A "point" (localized) defense is made by the high-acceleration Sprint missile which intercepts in the lower atmosphere at distances from 6 to 25 miles during the last few seconds of the enemy missile's flight. Sprint's function is to destroy attacking rockets which have successfully evaded Spartan. Its last-second intercept permits radars to "discriminate" between a real warhead and the "decoys" (false warheads) which burn up in the dense lower atmosphere.

Spartan and Sprint are armed with nuclear warheads because they will miss incoming ICBM's by distances so great that conventional explosives would be useless.[2] The two missiles are linked to advanced multiphase array radars and highspeed computers for target acquisition, tracking, launching and guidance.

THE "THIN" CHINA-ORIENTED DEFENSE

The military packaged Nike-X into three convenient deployments: the "thin" China defense priced at $3.5 billion; a "light" defense protecting 25 cities costing $12.2 billion; and a "heavy" 50-city system at $21.7 billion.[3] The Johnson Administration chose the first. It consists of several hundred Spartans and a lesser number of Sprints. The Spartans provide an "area" defense of the entire country; the Sprints defend radars and some Minuteman ICBM bases. The Spartans are distributed in several batteries below the Canadian border. PAR radars "acquire" incoming enemy missiles at ranges of 1,500 miles or more and the Spartan is launched to intercept high above the atmosphere over Canada hundreds of miles from United States soil. The thin China defense does not provide any Sprint point defense of American cities.

FUNCTION AND EFFECTIVENESS OF THE "THIN" DEFENSE

The Pentagon has defined the function of the China ABM system as providing "a thin cover over the whole United States including all cities." The official evaluation of the system's effectiveness is that it "could probably preclude damage in the 1970's almost entirely" against what are called "simple attacks."[4] By simple attacks the Pentagon means attacks by a very small number of missiles which do not have "penetration aids"—devices such as decoy warheads and "chaff" (clouds of tinfoil)—which confuse ABM radars.

One of the flaws in this optimistic evaluation of the effectiveness of the thin defense is that it gives the impression to the layman that Nike-X defends against all "simple" missile attacks. Unfortunately Nike-X is effective only against high-altitude delivery systems. It is possible to launch simple nuclear attacks using a number of "primitive" delivery techniques, some of which employ missiles. Against these systems Nike-X is of either minimal value or worthless. The following are examples of primitive delivery systems which should be within Chinese capabilities by the time the thin defense is operational, or soon thereafter:

Attacks by missiles

a. From submarines or surface vessels armed with short-range cruise-type missiles. (No Nike-X protection)

b. From submarines or surface vessels armed with medium-range ballistic missiles. (Possible minimal Nike-X protection)

Attacks by delivery systems other than missiles

a. Nuclear-weapon-carrying seaplanes launched from submarines or surface vessels.

b. Submarines firing nuclear torpedoes.

c. Pre-delivery systems: For example, vessels with bombs in cargo holds; weapons released in port or at sea and detonated by remote control.

d. Underwater nuclear mines detonated at sea. Prevailing winds carry radioactive rain inland.

China already possesses submarines and at least as early as 1966 tested a medium-range missile. A military expert recently wrote that the Chinese "now have submarines, they have fired short-range missiles and they would find it fairly simple to adapt these, or to build rather crude forms of sea-based missiles."[5] China reportedly does not have a submarine-launched missile capability. However, it is possible that Chinese technicians could develop in the next few years some form of sea-based missile capability.

Existing anti-aircraft and anti-submarine systems will be used against these primitive delivery devices, in some cases with effectiveness and in others without. As a general rule all forms of delivery tend to complicate the task of the defense.

The estimate of the effectiveness of the thin defense against ICBM's seems to based on at least two key assumptions, both open to serious question:

(1) The Chinese will not—or will not be able to—target their ICBM forces so as to "exhaust" or overwhelm the SPARTAN defenses by launching them *en masse* at an area defended by one SPARTAN battery.

(2) The Chinese will not be able to equip their ICBM's with simple penetration aids which would increase substantially their ability to inflict damage on the United States.

Footnotes at end of speech.

ASSUMPTION

In a confrontation between ICBM attacker and ABM defender the latter is at a distinct disadvantage. This is particularly true of the thin system, which requires that a very small ABM force be deployed over a vast area. Once an attack has been launched it is obviously impossible to redistribute the defense to meet the configuration of the attack. China, on the other hand, is completely free to study the ABM defense at its leisure, analyze it for its weak spots, and then program the attack to saturate or overwhelm it. If the thin defense had a density factor of, say, 50 i.e., if it could cope at any point with a maximum of only 50 enemy ICBM's, then by firing 55 missiles at any given point in the defense the attacker could be virtually certain of destroying the target. If the Chinese wanted to take out Washington, D.C., they could. If they wanted to get New York, they could. The same 55 missiles could probably get both Washington and New York. Dr. M. M. May, director of the Lawrence Radiation Laboratory in California, made this point clearly to members of the Senate Disarmament Subcommittee: "If you send over more offensive warheads than they have defensive warheads to shoot at you with, it won't be that effective."[6] Secretary McNamara said the same thing in his September 18th speech: ". . . any such [ABM] system can rather obviously be defeated by an enemy simply sending more offensive warheads, or dummy warheads, than there are defensive missiles capable of disposing of them."

It does not seem reasonable to assume that Chinese leaders, if they build and deploy a missile force of 50 ICBM's and then discover that the density factor of the United States defensive is exactly 50 also, are going to throw their missiles away as useless. They will obviously build a few more which will enable them to penetrate our defenses, thereby making the thin system ineffective by the time it is deployed or shortly thereafter, unless it were to be expanded into a more complex system. If this were done it would undoubtedly trigger further Chinese efforts to penetrate it. A more serious consequence of expanding the thin defense is that it would force the Soviets to improve their offensive capabilities—something they might not feel obliged to do if the thin defense remained thin.

The official view that the thin defense could prevent damage "almost entirely" is tempered somewhat by a Pentagon statistical table indicating that a Chinese attack of a certain magnitude which could, without ABM, inflict 10 million fatalities, would cause 1 million deaths even if the thin defense were deployed. If a false assumption went into that table it could cause the predictions of the effectiveness of the China defense to be off by a factor of five or more. This table was presented to Congress in January 1967, by Secretary McNamara.

ASSUMPTION 2

The China defense is designed to defend against "simple" and unsophisticated attacks, that is, attacks by only a few missiles without penetration aids. The same logic that applies to the determination of China's leaders to build a force large enough to penetrate ABM, also applies to penetration aids. To assume that Chinese scientists will not, indeed have not already, initiated a crash program to develop such devices would be irresponsible. A nation need not possess a sophisticated technology or be affluent in order to produce simple, cheap and probably effective penetration devices. In fact, a "naive" but presumably effective penetration aid can be produced at virtually no cost and without any special technology by breaking up the delivery vehicle in such a way that it explodes into fragments which to a radar resemble warheads. Chinese scientists are probably already beyond this stage.

The Director of Defense Research and Engineering, Dr. J. S. Foster, told the Senate Disarmament Subcommittee that it was possible for a "sophisticated opponent to confuse the defense and make the firepower demands on SPARTAN too high."[7] In that case, Foster explained, it would be necessary to use the SPRINT missile for defense. The thin China system which the Johnson Administration has purchased provides no SPRINTS for protection of cities. If the Chinese develop effective penetration aids they can probably exhaust SPARTAN and hit any cities they wish. If they are sophisticated enough to build ICBM's they should be able to design and produce reasonably efficient penetration devices.

WHAT CAN THE THIN DEFENSE DO?

The thin system can probably afford complete protection against the accidental or unauthorized launch of a few missiles—at least missiles not equipped with good penetration devices. It could also provide a degree of protection against small numbers of ICBM's, say 25, the sort of force the Chinese would have in the first 18 to 24 months of their deployment program. In the mid-1970's the Chinese could have 100–150 weapons.[8] Against an attack of that size the thin defense would look very thin indeed.

The discussion earlier on overwhelming SPARTAN was based on the assumption, highly favorable to the defense, that all attacking Chinese missiles would be successfully intercepted if their number in any target area did not exceed the density factor of the thin defense. This assumption is incorrect. However, it has gained general acceptance because it has been stated so often by experts such as Dr. May and Secretary McNamara. Actually, there is a finite chance that any given ICBM will penetrate any ABM defense. Assuming an ABM kill probability—the probability that a single SPARTAN will intercept a single incoming Chinese ICBM—of the order of 80%, the probabilities of a 100% successful defense against five different Chinese attacks are as shown below. Chinese missiles are assumed to have a reliability factor of 80% and to be without penetration aids.

Number of Chinese missiles	Number of Spartans	Probability of successful defense (percent)
20	50	72
25	50	44
35	50	1.6
50	50	.008
50	100	18

These figures give a far more realistic picture of the effectiveness of the thin defense than do the official claims. They demonstrate, for example, that a Chinese attack with 35 ICBM's fired at a SPARTAN battery with a missile force of 50, would have a 98% chance of hitting at least one U.S. city. Even with a force as small as 20 missiles launched at the same SPARTAN battery the Chinese would have one chance in four of destroying a target. 50 Chinese missiles fired against 50 SPARTANS would hopelessly overwhelm the defense and China would have a highly probability of hitting a number of cities.

CHINESE STRATEGIC OBJECTIVES

An unofficial rationale for deployment of the China defense is that the Chinese, as soon as they have a small operational ICBM force, will hurl it against the United States in a first strike. Richard Russell, chairman of the Senate Armed Services Committee, called China a "mad dog among nations" when demanding "immediate" deployment of a thin defense in an interview given in July 1967.[9] To some Americans China's leaders may appear unduly irrational at this moment and China's internal affairs may well be in exceptional disarray, but to base momentous national decisions, if we are doing that, on an assumption that in the early or mid-1970's China will launch a pathetic handful of ICBM's at the United States in the full knowledge that moments later it will sustain a devastating retaliatory barrage from America's vast nuclear arsenal, destroying cities, populations and industry—this in itself is a somewhat irrational attitude.

A more plausible explanation for China's ICBM program is that it fears a United States first strike and would like to be in a position to deter it, something it cannot do today. China, after all, is totally at the mercy of our nuclear strike forces—SAC bases in Thailand and Guam, tactical nuclear basis in South Vietnam, Thailand and Laos, carrier-based bombers in the Tonkin Gulf, the North China Sea, the Straits of Formosa, and a fleet of Polaris submarines along her coasts, not to mention Minuteman ICBM's based in the United States.

If under these conditions China's leaders believe they require a small number of ICBM's to deter us—something analogous to de Gaulle's *force de frappe*—they need not be regarded as wildly irrational. The United States possesses today vis-a-vis China a Perfect First Strike Capability; that is, we are able to devastate China without being touched. This enables us to deter China from any activities in Southeast Asia which might be displeasing to us, and it also shields us from Chinese obstruction of those of our activities in Southeast Asia which might be displeasing to them. China's leaders could not be blamed if they assumed that the United States, in deploying the thin defense to counter China's miniscule retaliatory force, was more concerned to maintain its Perfect First Strike Capability than to protect its urban population. In an interview shortly after his San Francisco speech Secretary McNamara said as much. "There has been lingering doubt in some Asian countries that if China in a few years were able to reach the United States with an ICBM, we would be deterred from taking actions that might risk a Chinese attack."[10] It sounds very much as if Massive Retaliation—that Rasputin of strategic doctrines—was still around.

Perhaps the most disturbing aspect of the decision to deploy the China defense is that it was taken not for overriding military, strategic or national security reasons but because of domestic considerations directly related to a forthcoming Presidential election.

The news in June 1967 that China had tested its second thermonuclear weapon brought from many of America's most powerful political leaders and from the military an instantaneous demand to deploy ABM. As far as can be ascertained not a single high-ranking individual from our political, diplomatic or military ranks suggested that, before deploying, the United States make a serious effort to settle its outstanding differences with China, or that we probe the sincerity of her 1966 offer to negotiate a mutual No First Strike pledge. Nobody has been heard to propose that we re-examine our China policy of isolation and containment, that we refrain from impeding China's trade with our allies, that we cease to oppose her entry into the UN, that we ourselves might even try to resume trading with her. We have provided the world with a paradigm of cursing the darkness: Apparently it did not even occur to us to light a candle.

NIKE X—CRITIQUE AND ANALYSIS

Even before Secretary McNamara had arrived in California to make his speech an-

Footnotes at end of speech.

nouncing the ABM decision the Congressional lobby was calling for the heavy defense and denouncing the thin program as "too little and too late." For them the thin defense is only a stepping-stone to bigger things. It is necessary, therefore, to examine not only the anti-China defense but the larger anti-Soviet system as well. Opponents have criticized the latter on grounds that it was not effective, that its cost estimates were grossly underestimated, that it would intensify the arms race, that it would destabilize international relations, that it would upset the balance of deterrence, that it would be a roadblock to further arms control and disarmament agreements, and that it could lead to a national deep shelter program of considerable magnitude, which might even change drastically the quality of American life. Since these questions are customarily discussed only in Congressional hearings or military conferences and only rarely come to the public's attention, it may be useful to examine them here and provide answers as given by the expert witnesses called to testify before Congress. Unless otherwise noted the quotations throughout Part Two are taken from the Hearings before the Subcommittee on Disarmament of the Committee on Foreign Relations, United States Senate, 90th Congress, First Session, February and March, 1967.

COST OF NIKE-X

The official pricetag of the China defense is $3.5 billion; that of the light defense is $12.2 billion, and the heavy system $21.7 billion.[11] That these estimates are unrealistic came out clearly in the hearings:

Sec. VANCE: . . . *I think those are very low estimates and the actual costs would probably be 50–100% of those [i.e., more than those], based upon actual experience with the procurement of entirely new weapons systems in the past.*

The costs . . . if past experience is any guide, may be understated by 50–100% for the systems as a whole—of Posture A and Posture B [the light and the heavy systems].

Gen. WHEELER: *I think in all fairness I should point out that Secretary McNamara feels that these costs would be exceeded by perhaps 50 or even 100%.*

Deputy-Secretary Vance brought out a vital point:

Sec. VANCE: *Because of . . . the very rapid rate at which the technology changes, to maintain an effective system one would essentially have to turn over the whole system, the whole $20 billion system every few years. I do not believe that we would do this. As a consequence, I am afraid we would have a heavy deployment of a system most of which was obsolete, made obsolete by changes in the enemy's offense.*

This means that the 10-year cost of the light 25-city system will be on the order of $50 billion and for the heavy 50-city defense it will perhaps reach $87 billion or more. These figures make no allowance for various Nike-X ancillary programs—air defense, antisubmarine warfare, blast and thermal shelters.[12] One recognized expert has stated that the cost of a blast shelter program for urban populations would be comparable to the cost of a major ABM deployment.[13]

HOW EFFECTIVE IS NIKE-X?

Nike X has never had full-dress testing under simulated combat conditions. The partial test ban treaty of 1963 limited Nike-X weapons to underground testing. Nike-X remains today—after the decision to deploy has been taken—largely a paper system. This is true not only because it has not yet been adequately tested but also because many of its radars have not yet reached the prototype stage. The record of failures with new weapons systems far less complex than Nike-X, which either were not or could not be tested prior to combat, suggests that Nike–X might fail disastrously in an actual nuclear exchange.[14]

The effectiveness of a heavy anti-Soviet system was thoroughly discussed during the Disarmament Subcommittee hearings. In the exchanges below the experts are Gerald Tape, a Commissioner of the Atomic Energy Commission; Dr. Michael May, Director of the Lawrence Radiation Laboratory; and Dr. Norris Bradbury, Director of the Los Alamos Scientific Laboratory.

Sen. LAUSCHE: *Do you and your experts conclude that we can develop an effective anti-ballistic missile?*

Dr. MAY: *We can develop an anti-ballistic missile system that would be very effective against light attacks and the effectiveness of which will go down as the degree of the severity of the attacks go up. I am sorry I can't give you a more definite answer than that.*

Sen. FULBRIGHT: *In short, you don't know?*

Dr. TAPE: *No, this goes back to Dr. May's original statement that you can overwhelm an ABM. Also, he is saying if the opponent wants to overwhelm ours, it can be overwhelmed.*

Dr. MAY: *It probably can be overwhelmed.*

Another exchange—

Sen. LAUSCHE: *Can we overwhelm their system?*

Dr. MAY: *At present, yes, sir.*

Sen. LAUSCHE: *You are also saying that they could overwhelm our system if we established one in accordance with what you think can be done?*

Dr. MAY: *I can't answer when a system is perfect. I don't know when a system is perfect, and I can't answer when a system is completely effective. Nobody knows that.*

Dr. John Foster, Jr., Director of Defense Research and Engineering—

Dr. FOSTER: *. . . we would have to expect that in an all-out exchange dozens of their warheads would likely explode in our cities. . . . I do not believe that the deployment of a very heavy ballistic missile system is technically justified.*

Dr. BRADBURY: *I don't believe the system is reliable and I think the resulting failures you will get against a mass attack would simply make me ask myself, Why am I doing this? . . . It seems to me the task of protecting cities will not eventually completely protect cities. . . . I don't think there will be much of us left over, although it would probably be better than nothing.*

Secretary VANCE: *I would be willing to expend whatever amount of money was required if we could get a truly effective defense. I do not believe we can. Therefore, I feel it would be simply imprudent to waste the funds in an attempt to do so . . . if it would cost $60 billion and would truly protect our population. I would recommend that it be deployed. But I do not believe it can . . .*

A quotation from Secretary McNamara's September 18 speech—

If we could build and deploy a genuinely impenetrable shield over the United States, we would be willing to spend not $40 billion, but any reasonable multiple of that amount that was necessary. The money in itself is not the problem: The penetrability of the proposed shield is the problem.

Technology Week, 20 March 1967—

The performance of the Nike-X radar, communications and information-processing systems will have to be tested against the effects of full-scale high-altitude nuclear explosions before any confidence can be put in the system as a means of destroying more than one or two incoming warheads. [Emphasis added.]

If the Secretary of Defense, the Deputy Secretary of Defense, a Commissioner of the Atomic Energy Commission, two Directors of government atomic laboratories, and the Defense Department Director of Research and Engineering qualify as credible witnesses, there can be little doubt but that the effectiveness of the anti-Soviet system has marked limitations.

The key issue, however, is not whether the heavy ABM can defend against today's Soviet ICBM's, but whether it can defend against the new Soviet missiles it could be facing when it is finally deployed about 1973. By then both the Soviet Union and the United States may have replaced present missiles with MIRV—the multiple independent reentry vehicle. A single rocket armed with a MIRV warhead will be able to deliver several individual thermonuclear bombs, each on a separate target, probably assisted by the latest penetration aids. Secretary McNamara has said "The optimistic statements made by ABM proponents haven't taken such things as MIRV's fully into account. . . . Both our missile defense system and theirs were designed before MIRV's came along."[15] *Nike-X now is in much the same position as the ill-fated Nike-Zeus system was in 1959—obsolete before deployment.*

HOW MANY MILLION AMERICANS CAN NIKE-X SAVE?

If Nike-X had an unequivocal capability of saving lives there would have been no opposition to deployment. The real question about Nike-X—which is never asked—is *not* how many lives it will save but whether it is not likely to cause a greater number of fatalities than if it had not been deployed.

General Wheeler, representing the Joint Chiefs, stated the position of the military in these words: "The 30, 40, or 50 million American lives that could be saved by Nike-X, therefore, are meaningful, we believe, in every sense of the word." Secretary McNamara, Deputy Secretary Vance, and Dr. Foster took an entirely different view of the life-saving capability of Nike-X. They presented to the Subcommittee two statistical tables. The first demonstrated that if the United States deployed the light defense system, as many as 80 million lives could be saved in the event of a Soviet first strike *provided the Russians did not respond to our ABM deployment by increasing their offensive missile forces.* The second table gave the American casualties if the Soviets did increase their forces—the total was 120 million dead, *precisely the same number that would have been killed if ABM had not been deployed.*

The Joint Chiefs cling to the opinion that the Soviets would probably not respond to United States deployment by increasing their offensive forces. General Wheeler told the Subcommittee that economic and technical expenditures necessary to counter Nike-X might be beyond the capacity of the Soviet Union. They would have to pay a "high price," Wheeler said, to overcome ABM.

The civilian side of the Pentagon took the opposite view—

Dr. FOSTER: *It is inconceivable to me that we could deploy such a heavy defense and not have the Soviets take measures which would minimize its effectiveness.*

Sec. VANCE: We believe that the Soviet Union would be forced to such a deployment by increasing its offensive nuclear forces with the result that . . . the damage to the United States from a Soviet nuclear attack, in the even deterrence failed, would not be reduced in any meaningful sense . . . deployment by the United States of an ABM defense which would degrade the destruction capability of the Soviet's offensive force to an unacceptable level would lead to an expansion of that force. This would leave us no better off than we were before.

Sec. MCNAMARA: In all probability all we would accomplish [by deploying the heavy system] would be to increase greatly both their defense expenditures and ours without any gain in real security to either side.

The so-called heavy ABM shield [would be] a strong inducement for the Soviets to vastly

Footnotes at end of speech.

increase their own offensive forces. . . . [Sept. 18 speech]

TECHNOLOGY WEEK: Another effect of the uncertainty of Nike–X effectiveness is that the aggressor has to assume that the system works very well and then attack it with a sufficient number of nuclear warheads to overwhelm it completely. That is, the intensity of a nuclear exchange can be greatly increased by the presence of an ABM system. [20 March, 1967]

The attractive proposition that Nike–X will save lives is based almost entirely on the questionable premise that the Soviet Union would permit the United States to undertake a major ABM program, thereby reducing substantially the Soviet retaliatory capability, without making any effort to redress the balance. The Joint Chiefs rationalize their opinion with the assumption that the Russians really could not afford to increase their forces. This is much the same view as that which maintains the Chinese will not be able to design penetration aids.

It is particularly surprising to hear from the Joint Chiefs that the Russians would not increase their offensive forces to maintain their threatened deterrent capability. Inasmuch as it is from precisely their offices in the Pentagon that originate countless news releases warning of the latest Soviet progress in building more missiles, of improvements in penetration aids, of ABM's around Moscow, of the ABM capabilities of the Tallinn defense line. Reports of this type are constantly leaked to journalists covering the Pentagon.[16]

Had the United States been able to negotiate with the Soviet Union an agreement to deploy ABM systems in the context of a "freeze" on offensive forces or, preferably, a reduction of forces-in-being, then ABM deployment would undoubtedly mean millions of lives saved in the event deterrence failed. But with massive increases in offensive ICBM forces equipped with the latest and most sophisticated penetration aids, ABM does not look as if it was going to save many lives; and it is not an impossibility, if offensive forces reach unreasonable levels, as they now threaten to do, that deployment of anti-ballistic missile defenses could increase fatalities above the pre-ABM level.

NIKE-X AND THE NUCLEAR BALANCE

1. Effect on the arms race

In his San Francisco speech Secretary McNamara left no doubt in his listeners' minds that an anti-Soviet deployment would have an adverse effect on the nuclear balance and on the arms race: A heavy defense, he said, would not only fail to provide adequate protection against a Soviet attack but would instead be "a strong inducement for the Soviets to vastly increase their own offensive forces . . . and so the arms race would rush hopelessly on. . . ." On no other issue is the split between the Joint Chiefs and the civilian side of the Pentagon so sharp. As one of his five reasons for recommending Nike-X, General Wheeler, on behalf of the Chiefs, said that it would "stabilize the nuclear balance."

Deputy Secretary Vance has said that the basis of the United States deterrent is its ability to "destroy the attacker as a viable 20th-century nation." This he defined as the destruction of "one-fifth to one-half of the population and one-half to two-thirds of its industrial capacity. . . ." The official term is "Assured Destruction." Vance added: "We believe the Soviet Union has essentially the same requirements for a deterrent or 'assured destruction' force as the United States." In the September speech McNamara spelled it out: "We can be sure that we are both [United States and Soviet Union] going to maintain a maximum effort to preserve an assured destruction capability . . . we can be certain [if we deploy a heavy ABM system] that the Soviets will react to offset the advantage we would hope to gain . . . we must measure our own response in such a manner that it does not trigger a senseless spiral upward of nuclear arms."

Since 1963 the arms race has been marked by relative stability. However, when the Soviets deployed an ABM system around Moscow the response in the United States was to deploy a thin system across the entire country and to develop new "generations" of ICBM's with highly sophisticated penetration aids. The Soviet Union is now increasing its offensive forces and there is already considerable political pressure in this country to go beyond the modest thin defense to a much larger deployment against the Soviet Union. When the U.S. MIRV system becomes operational in four to five years, the number of thermonuclear warheads in our offensive missile forces will increase from the present total of 1,710 to 7,500 or more.[17] In view of these ominous developments within such a relatively short time span, the claim of the Joint Chiefs that Nike-X will stabilize the nuclear balance has been shattered as thoroughly as the balance itself.

With ABM deployment the arms race, until now in a single dimension, has become a three-dimensional contest in offensive weapons, defensive systems, plus a feverish technological effort aimed at scoring qualitative breakthroughs. The meaning of this new and highly lethal phase of the arms race is that as each side deploys new ICBM's with ever more sophisticated penetration devices and as the other responds with more ABM's and more ICBM's in its turn, neither can be certain at any moment that it has not lost, if only temporarily, its Assured Destruction capability. In short, it may fear it can no longer deter the other from a first strike. Russia and the United States will view each other with constant mistrust and suspicion; tension will replace detente; an action which under less tense circumstances would appear innocuous might seem extremely threatening, in fact, might even be interpreted as indicating an incipient first strike. Forces-in-being will be at much higher levels than they are now; this could mean that fatalities in the event of a nuclear war would be greater than if ABM had not been deployed. In this new climate of hostility and insecurity the "gap psychosis" will further increase instability. Both military and civilian leaders will be afraid of a deterrent gap, and ICBM gap, a civil defense gap, an ABM gap, a technological gap, and it is likely that every move they make will overcompensate for a suspected gap in any of these areas.

If the military wished to stabilize the nuclear balance they could have proposed a different ABM deployment. Nike–X, if it were emplaced around missile bases rather than cities, would in all probability have a stabilizing effect on deterrence. The reason is simple: A nation launching a first strike would obviously have to aim it at the enemy's missile bases, not his cities. The retaliatory strike is aimed at cities; its purpose is to make the country which struck first pay an unacceptably heavy price. By deploying ABM to protect its civilian population a country is reducing the Assured Destruction potential of the other side thus making its own first strike more feasible. The larger and more effective a nation's ABM defense the more threatening it would appear and the better the position it would be in for launching a first strike. But by deploying ABM *only* around its missile bases a nation would increase its retaliatory second strike capability, making it much more dangerous for another country to launch a first strike against it.

There is no more convincing proof of the destabilizing effect of ABM than the statement to the Disarmament Subcommittee by General Wheeler that ". . . it's also the view of the Joint Chiefs that regardless of anyone's feelings about the situation in Vietnam, we think it quite clear that we would have had even more hesitation in deploying our forces there, had the strategic balance not been in our favor." That statement cuts close to the bone. The General is saying that in order for the United States to be able to carry out its self-appointed role as policeman for Asia and other parts of the world, in order to fulfill our "commitments" to defend first this country and then that, we need something like a First Strike Capability. Surely that is what the Joint Chiefs mean when they claim that Nike–X will "stabilize the nuclear balance."

Another of the General's five reasons for recommending Nike–X is even more revealing: Nike–X deployment, he told the Senators, would "introduce uncertainties which would inhibit Soviet leaders from concluding that . . . the United States would not preempt under any circumstances." To preempt means to *strike first*.

2. Effect on arms control

Nike–X, like its abortive predecessor Nike-Zeus, has not been tested adequately. The radars are not yet ready, and the warheads have only been tested underground because of the partial test ban treaty of 1963.

Perhaps it will be possible to install the thin China defense without great pressure being placed on the Administration to test Nike–X in the atmosphere, but it is inconceivable that the larger deployments will be emplaced without an overwhelming demand for full and complete tests of the entire system. This would very likely lead to breaking the test ban treaty.

Technology Week examined this point: *It is therefore very likely that the performance of the Nike–X radar, communications and information-processing systems will have to be tested against the effects of full-scale high-altitude nuclear explosions before any confidence can be put in this system as a means of destroying more than one or two incoming warheads. . . . It is very hard to believe that the United States will commit itself to an expenditure of $20 billion for Nike–X without carrying out full-scale tests to see how cost-effective it is.* [March 20, 1967]

In 1966 a deputy director of the Defense Atomic Support Agency told a Congressional committee he did not believe it was possible to test Nike–X underground, that extrapolations from underground tests were less reliable than from those in the atmosphere and gave rise to "some definite doubts" about Nike–X performance.[18]

For the moment little will be heard about the "necessity" to test Nike-X in the atmosphere, but within 12 to 18 months it is likely that members of the military and of the Joint Congressional Committee on Atomic Energy will call for a resumption of atmospheric tests in the interests of "national security."

Nike-X will not only jeopardize past arms control accords; it is certainly not going to create the sort of world climate in which we can look forward with confidence to new agreements. Negotiations on the crucial nonproliferation treaty have already been disrupted by plans to deploy the thin defense. The secretary-general of NATO, Manlio Brosio, announced at a news conference the day after Secretary McNamara's speech that a European ABM defense was "under consideration in the alliance."[19] Future arms control measures, for instance a "freeze" or a reduction of ICBM forces, are not going to be speeded up by Nike-X. In *Foreign Affairs* a military expert recently wrote:

At the very least, therefore, the deployment of anti-ballistic missiles would in all probability lead to a hiatus in arms control negotiations, while both sides tried out their new weapons, decided on countermeasures to each other's deployment and reestablished an effective and acceptable strategic balance. It could mean the loss of any chance for an early agreement on comprehensive test

Footnotes at end of speech.

ban and on the non-proliferation of nuclear weapons. . . ." [20]

3. Nike-X and civil defense

Nike-X deployment means that civil defense will soon become a major national program. In Dr. May's words to Congress—

The word [ABM] is often also used to refer to a set of shelters which would have to go with the system to make it a reasonable instrument of defense. . . . [Shelters are] probably the first step [in deployment].

General Wheeler told the Disarmament Subcommittee that the present total of shelters for 153 million people will be increased to "around 250 million," doubling the fallout program costs from $.8 billion to $1.6 billion over the next four years. But the fallout shelter is only the begining. It is to civil defense what the thin ABM deployment is to the heavy anti-Soviet system.

Even before Secretary McNamara announced the decision to proceed with the thin China defense, the same men who had forced its deployment began calling for a heavy defense. The Chairman of the Joint Committee on Atomic Energy, Senator Pastore, called the Administration's decision "a step in the right direction" which would lead to an "over-all system against the Soviet Union." [21] Washington's Senator Jackson said it was not solely a Chinese problem, but must include a capability to "blunt" a Soviet strike.[22]

There is nothing subtle about these tactics; they are the sledgehammer type and there is no political deployment that can defend against them. One does not have to be clairvoyant to predict a further Administration capitulation on the heavy defense, *perhaps even before the China system has been installed.* The technique that make this inevitable was explained by General Wheeler to the Senators:

Gen. WHEELER: *These [ABM] costs could be exceeded by perhaps 50% or even 100% . . . the demands of the people for heavier defenses in other areas, would inevitably increase the costs ultimately to something like $40 billion.*

Sen. GORE: *In other words, if St. Louis is to be defended, then Kansas City must be.*

Gen. WHEELER: *That is right, sir.*

Sen. GORE: *And Memphis.*

Gen. WHEELER: *That is right, sir.*

Aviation Week and Space Technology, the trade journal of the aerospace industry, quoted two knowledgeable observes on this question in its October 23, 1967 issue:

America in either too sophisticated a country—or not sophisticated enough—to stop deployment with a light system. There is no question but that, once we start building, we will have to build a complete system, the best that money can buy. [A "neutral Senate source"]

Once the anti-Chinese system is in place, it's going to grow, inevitably, into an anti-Soviet system no matter who tries to block it. That's the American way, and the political pressures will be too great for anyone to stop it. [Source unidentified]

Eventually we will end up with a "superheavy" defense of every American city of over 50,000 population. The men who so successfully "marketed" Nike-X on the grounds that it would have lives and stabilize the nuclear balance, who assured us that the Soviets would not increase the size of their offensive forces, will suddenly warn the public that in view of the enormous increase in Soviet ICBM's, the tense state of world affairs and the instability of deterrence, the nation must move quickly to build blast and thermal shelters to protect its people.

In the opinion of a distinguished physicist, Dr. Freeman Dyson of the Institute for Advanced Studies in Princeton, N.J., who has served as consultant to the Atomic Energy Commission, the Defense Department and the Arms Control and Disarmament Agency, a massive civil defense program will require extensive participation of the civilian population in quasi-military activities. He sees the United States being turned into what military strategists call a "hard society." The term "hard society" Dyson defines as training and hardening a whole population "in a spirit of unquestioning obedience in order to withstand a nuclear attack, much as a missile silo is hardened by encasing it in a certain thickness of concrete." [23]

Dr. Dyson's fears are far from fantasy. In 1958 the RAND Corporation published a paper entitled "Some Specific Proposals for Achieving Early Non-Military Defense Capabilities and Initiating Long-Range Programs." It is merely a list of suggestions for research projects in civil defense, but it is well worth reading for the candid and sombre insight it gives into the sort of civil defense programs which may be in store for Americans. Among the suggestions are—

MINES AS PERSONNEL SHELTERS: *$1 million, 2–90 day occupancy.*

PSYCHOLOGICAL AND PSYCHIATRIC STUDIES: *$200,000: A study would be made of the preparation for family separation and of shelter techniques for handling this problem.*

STUDIES OF VERY AUSTERE SHELTERS AND LONG OCCUPATIONS *($1.5 million): A study should be made of the survival of populations in environments similar to overcrowded shelters (concentration camps, Russian and German use of crowded freight cars, troop ships, crowded prisons, crowded lifeboats, submarines, etc.).*

Some useful guiding principles might be found and adapted to the shelter program. Research projects might include: Study of available information that might suggest human endurance, the latter to be used to determine overcrowding tolerances and for defining the early capability needed in personnel shelter studies ($200,000). Investigation of the use of sedation and chemical tranquilization for long periods and for possible use in shelters ($800,000).

SOCIAL PROBLEMS *(Excerpt): ". . . Prolonged confinement in shelters will unavoidably produce emotional stress. Various measures regated activity, or discipline areas, etc.) ought to be studied and prepared in order to maintain shelter discipline, to lessen the mental strain and to minimize he incidence of psychological aftereffects."*

FOOD PROBLEMS *(Excerpt): "Survival and emergency rations used by the Armed Forces are costly and are not designed to be used by a population for survival. An army survival ration costing 75 cents per person per day would mean a total ration cost of $150 million per day. Based on a minimum cost diet, a suitable shelter ration might cost no more than 40 cents per person per day, a saving of almost 50% which would certainly make research in this area worthwhile."*

There has been talk on and off of other schemes like "Evacuation Cities" which are a sort of second underground city to which urban populations could be removed in times of acute crisis like the 1962 Cuban missile confrontation, the idea being that the first country to put its urban populations underground would be in a better strategic and bargaining position than the one which had not. There are serious implications for such basic liberties as the right to travel freely; some experts fear that civil defense regulations will require identity cards, travel permits, surveillance. The effect on already blighted, ghettoed cities can be imagined.

BUT ISN'T IT BETTER THAN NOTHING?

The question is asked repeatedly—Nike-X may not be very good but isn't it better than nothing? If it saves only ten American lives isn't it still worth $5 billion? But what if Nike-X costs ten lives that would not have been lost had it not been deployed? That question is not asked. If Nike-X disrupts the nuclear balance disastrously, if it accelerates the arms race, increases world tensions, regiments American society and is not effective—is it then better than nothing? As stated above, if Nike-X were deployed only around missile bases in the context of a reduction in offensive forces with, perhaps, a very small SPARTAN defense to protect against accidental or unauthorized launch of one or two ICBM's there might be good reason to believe that it was better than nothing. But on the basis of the evidence supplied by experts, it appears more likely than not that Nike-X will turn out to be a disaster for the American people.

It is an attempt to solve essentially non-military problems—protecting people and reducing the danger of war—with a purely military solution. From the military it is reasonable to expect a solution like Nike-X. It is less understandable why politicians should lend it such whole-hearted support; their principal commitment should be to an entirely different set of references.

The American people must be clear on one point. By developing ABM the United States has turned its back on a more stable and livable world and is heading straight toward what Secretary McNamara on September 18th, 1967, so aptly called an "horizon of horror." The holocaust the whole world fears is now that much closer.

During the Disarmament Subcommittee hearings an exchange took place between Deputy Secretary Vance and some Senators. They had been discussing the possibility that China could destroy 20 American ports by having cargo vessels release nuclear bombs in them before leaving for the sea:

Sen. GORE: This is a frightening world.

Sec. VANCE: It is a frightening world, Senator; I agree.

Sen. SPARKMAN: It becomes more so as we move along.

Sec. VANCE: It does indeed.

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[1] The words "fatal defects" are those of Dr. John S. Foster; Hearings before the Senate Subcommittee on Disarmament of the Committee on Foreign Relations, 90th Congress, 1st Session.

[2] Rex Pay, "U.S. ABM Would Imperil Test Ban Treaty." *Technology Week,* March 20, 1967.

[3] Until September 18, 1967 the estimate of the cost of a thin defense against China was $3.5 billion. In announcing deployment of the China system Secretary McNamara gave a revised figure of $5 billion. (Cost presented at DSH.)

[4] The function of the thin defense is given in a special list of answers to questions posed to Dr. John S. Foster, Jr., by members of the Senate Subcommittee on Disarmament. This list was printed in the official transcript of the hearings. The statement on effectiveness was made by Deputy Secretary Vance before the same Subcommittee.

[5] J. I. Coffey, "The Antiballistic Missile Debate," *Foreign Affairs,* April 1967.

[6] Dr. May's statement is excessively optimistic. It is actually not necessary that the offense outnumber the defense in order to penetrate the thin system. As demonstrated on page 7, a relatively modest Chinese ICBM force can successfully penetrate the thin defense. 55 Chinese ICBM's fired at a defense with a density factor of 50 would score *many* hits. (Dr. May's statement made to DSH.)

[7] Foster's remark means that SPARTAN is not very effective against ICBM's carrying penetration aids; it confirms the view that the thin defense is presumed to defend against the simplest possible ICBM forces. (DSH)

[8] *New York,* 15 September, 1967.

[9] *New York Times,* 6 August, 1967.

[10] Robert S. McNamara, "Defense Fantasy Come True," *Life,* 29 September, 1967.

[11] The degree to which these estimates are unrealistic is indicated by the increase in the

cost of the thin defense. Between March 1967 and September 1967 it rose from $3.5 billion to $5 billion—a 43% jump. The full deployment cost of the thin defense may accordingly come close to $10 billion.

[12] *The New York Times* of September 25, 1967, reported that Secretary McNamara announced a $5 billion additional expenditure for improved air defense, presumably to plug the gaps in the thin system.

[13] Freeman J. Dyson, "Defense Against Ballistic Missiles," *Bulletin of the Atomic Scientists*, June, 1964.

[14] The classic example of a gross miscalculation in the effectiveness of a weapons system is the German air defense in World War II. The kill probability was figured at .25 per round fired; in other words for every four rounds fired they would down one enemy bomber. These calculations were made prior to testing, and were later verified in tests at proving grounds. In actual combat the kill probability turned out to be .0002, one-one thousandth of the predicted figure. Decision-makers were off not by a factor of five or ten—but by *three orders of magnitude*.

[15] Robert S. McNamara, "Defense Fantasy Come True," *Life*, 29 September, 1967.

[16] Hanson Baldwin, military correspondent of the *New York Times*, is a favorable channel the military use to feed their viewpoint to the public. A Baldwin story in the *Times* for May 21, 1967, cites "one high-ranking officer in the Pentagon who is privy to all intelligence figures and estimates" as saying that the Russians are going to achieve ICBM nearparity by 1970 and will have surpassed the United States in megatonnage and in defense weapons. An excellent illustration of a different Pentagon technique is a report released in July, 1967 by Mendel Rivers' House Armed Services Committee. The 108-page study was actually prepared by the right-wing American Security Council, a private research organization directed by retired senior military men, among whom are generals Curtis LeMay, Thomas Power, and Bernard Schriever. The report predicted Soviet nuclear superiority over the United States by 1971.

[17] *U.S. News and World Report*, 16 October, 1967; also Associated Press dispatch, Bob Horton, 16 September, 1967.

[18] Dr. Theodore B. Taylor; Hearings before the House Appropriations Committee, 89th Congress, 2nd Session, 1966.

[19] *New York Times*, 20 September, 1967.

[20] Coffey, *op. cit.*

[21] *New York Times*, 19 September, 1967.

[22] *Ibid.*

[23] Dyson, *op. cit.*

(All quotations identified in the text as made before the Senate Disarmament Subcommittee were given at the hearings specified in footnote 1 above. The abbreviation DSH in the footnotes means the statements in question were made at these hearings.)

Captain of Aviation Industry

EXTENSION OF REMARKS
OF
HON. CLARENCE E. MILLER
OF OHIO
IN THE HOUSE OF REPRESENTATIVES
Friday, December 15, 1967

Mr. MILLER of Ohio. Mr. Speaker, on the 6th of December, in Dallas, Tex., the Honorable James A. Rhodes, Governor of Ohio, was awarded general aviation's highest honor. The Captain of Aviation Industry Award was bestowed by the National Aviation Trades Association for the Governor's "contributions to the growth of business aviation," and "steadfast dedication to the principle that man's greatest dignity is employment," bringing "an improved standard of living for all peoples under his influence."

Ohio rightfully claims the title "Birthplace of Aviation," and through Governor Rhodes' efforts has become the most airminded State in the Nation.

Transportation, like education, is a cost of production and absolutely vital for a State to achieve full economic growth and provide thousands of jobs annually needed for young people, Governor Rhodes believes. I would like to quote his speech delivered to the National Aviation Trades Association convention in Dallas:

The most important responsibility we in government, Democrat and Republican alike, have is to create an attitude and climate in our states and communities so present industry will expand and new industry will be attracted. Why? Because in Ohio alone we need 75,000 new jobs annually to supply the expanding labor market. We are going to create these new jobs. Educate, train, and retrain our young people to fill them . . . or, we're going to fight them in the streets.

Some people say government should provide programs, busy-work, to take care of our young people. I say the young people want jobs. They want dignity and decency. They want to hold their heads high as productive members of society. They do not want to just be kept busy.

To provide more and better jobs, industry must make a profit so it can expand and new industry will be attracted. This is why we have adopted the slogan in Ohio that "Profit is not a dirty word."

An excellent transportation system is the lifeline of industry, business, commerce and agri-business. An item which costs a dollar additional to ship, costs a dollar more in the market place.

We have worked hard the past five years to make Ohio the Transportation Center of the Nation. We shall be finished first with our Interstate System. We have more highways, truck lines, railways, and air facilities per capita than any other state in the Union.

Why? Again, because transportation is a cost of production. This is the reason we have pushed for a network of airport facilities . . . an airport in each of Ohio's 88 counties. The world cannot move without aviation. Time is money and business people will not jet hundreds of miles between major cities and then take hours riding in an auto to a plant site. These executives demand modern air facilities.

Governor Rhodes continued by emphasizing his belief that jobs for the able-bodied is the major need to cure unrest and social ills. For this reason, industrial development has been stressed in Ohio. He said that in the period 1963–67, Ohio had $6.4 billion in new industrial capital investment, and led the Nation in 1964, 1965, and 1966.

He continued:

Certainly one of the major reasons for this record growth is our airport program. Many of these new-to-Ohio companies gave as the number one reason for locating in Ohio the fact that a business type airplane landing strip was within minutes of the plant site.

It is my belief that more States and perhaps the Federal Government could do more to eliminate poverty if it adopted Governor Rhodes' philosophy of attracting industry to provide legitimate jobs as opposed to Government-sponsored "busy-work" projects which only temporarily solve the unemployment problem.

As Governor Rhodes so aptly says:

Someone must stand between the tax spender and the tax payer. The public will pay for good service, outstanding programs, and progress. They will not stand for waste, extravagance, or boondoggling. In Ohio, we insist on giving a dollar value for a dollar invested.

President Asks for Fair Share for the American Farmer

EXTENSION OF REMARKS
OF
HON. NEAL SMITH
OF IOWA
IN THE HOUSE OF REPRESENTATIVES
Friday, December 15, 1967

Mr. SMITH of Iowa. Mr. Speaker, in an excellent address over national educational television, President Johnson presented to the Nation the report of the National Advisory Commission on Food and Fiber.

As the President noted in his remarks, America owes much more to its farmers than we have returned to them.

Our farmers have made us the best-fed people on earth, they have richly contributed to our Nation's economic well-being, and they have enabled America to nobly respond to the pleas of the world's hungry millions. Yet, as the President put it, the farmer "gets less than his fair share of the prosperity."

For this reason, the President established 2 years ago the Advisory Commission to help America provide a fair income to its farmers and a fair profit to its food and fiber industries.

The labors of this special commission underscore the President's concern for finding the hard answers to farm problems which have eluded 35 Presidents.

Few men are as uniquely qualified to tackle the problems as President Johnson—as he said, "agriculture is a subject that has been very close to my heart all my life."

Let us hope that the Advisory Commission's report will equip his administration and the Nation with the tools to bring the full blessings of American prosperity to the American farmer and his family.

I include in the RECORD the President's remarks on the food and fiber report:

REMARKS OF THE PRESIDENT FOR NATIONAL EDUCATIONAL TELEVISION, FOOD AND FIBER REPORT, TELEVISED DECEMBER 7, 1967

Every man enjoys the chance to talk about something that he knows something about. I think that is even true of Presidents.

Agriculture is a subject that has been very close to my heart all of my life. My roots have always been in rural America. That is why I am very happy today to have this chance to remind my fellow Americans of the debt that I think we owe to the American farmer and to his family.

Our farmers have made us the healthiest and the best fed people in all the world, throughout all history. They have given us much more than just the necessities of life. Every day, they bring us a harvest of great